

## **Abstract**

**Title:** Physical therapy procedures in patients following the operation of the anterior cruciate ligament

**Objectives:** The main objective of this work is to determine the influence of the chosen method of reconstruction and subsequent physiotherapy on the final status of the patient. And also if the group physiotherapy is the ideal therapeutic approach.

**Methods:** In quantitative research the numerical analysis of the data was performed. Comparison of individual groups was performed simply through finding the frequency distribution of individual characters. Evaluated were the basic sets A (patients operated on by Bone - Tendon - Bone method, BTB) and B (patients operated on by hamstring graft method, STG). Both sets were assessed using the input and the output kinesiological analysis. The resulting values of the variables in each category (individual examinations in the input and output kinesiological analysis) were compared with each other. The statistical significance of observed differences was tested using the  $\chi^2$  (chi square) test at the significance level of  $p < 0.05$ .

**Results:** It was determined that the selected surgical method (BTB and STG) has an effect on certain parameters evaluated in the input rated kinesiological analysis. These parameters in the majority of examinations performed at the output of kinesiological analysis practically leveled [became almost identical]. Based on observed data, the group postoperative physiotherapy proved to be a suitable method of postoperative exercises. Nevertheless it is appropriate for the postoperative physiotherapy of the two reconstruction methods [BTB and STG] to be performed separately. Two separated physiotherapy subgroups should be used. Also very important is to use individual approach for individual problems of each patient.

**Keywords:** anterior cruciate ligament, physiotherapy, Bone-Patellar Tendon-Bone graft, hamstring graft